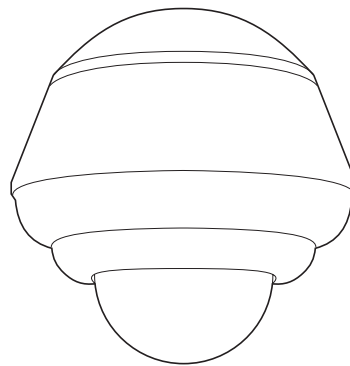




**DRD08/DRD14 Series
Receiver/Drivers for
Intercept® Series
Domes**

**Installation/
Operation Manual**

C466M-E (6/99)

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REVISION HISTORY

Manual #	Date	Comments
C466M	9/93	Original Manual
C466M	9/94	Rev. A. Manual updated to include "P" version control type, as well as the elimination of "B, C, E, and F" control type information as per the following ECO numbers: 94-27, 94-102, 94-118, 94-309, 94-348. Manual converted to new layout design.
C466M-B	1/95	Rev. B. Manual revised to include additional address and baud rate setting information, as well as updated extended features and operation information as per the following ECO numbers: 94-346, 94-347.
C466M-C	5/95	Rev. C. Manual updated to include additional Scan Mode information as per ECO# 94-567.
C466M-D	7/95	Rev. D. Manual updated to include corrected information on "D" and "P" version address switch settings (Figures 3 and 7).
C466M-E	1/98	Revised manual to reduce the number of models, to modify installation instructions, and to incorporate addendum of Feb. 13, 1996. Changed manual to new format and manual pagination.
	6/99	Revised manual to include applicable certifications. Revised Section 5.3.4.1, Word Three, B1 and B0 functions.

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1.0 GENERAL

1.1 IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
5. The installation method and materials should be capable of supporting four (4) times the weight of the enclosure, pan/tilt, camera and lens combination.

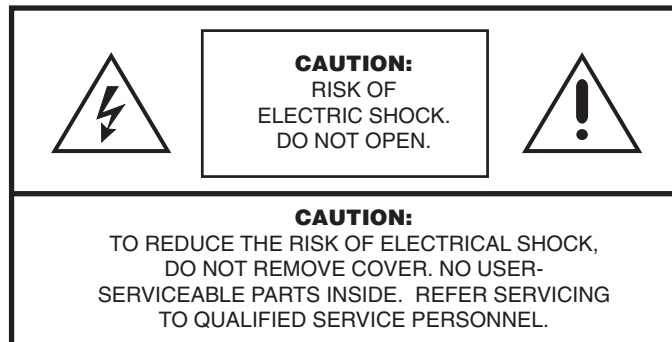
The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

2.0 DESCRIPTION

The DRD08 Series of receiver/drivers is part of the IDS08 Intercept® Series of domes. The IDS08 Series is an integral system that includes a back box (BB08), dome drive (DD08), dome receiver/driver (DRD08), and imager/optics package (IOP08). This manual covers the DRD08 Series of receiver/drivers. For installation and operation instructions for the back box, refer to manual C456M-D; for the dome drive, refer to C416M-C; and for the imager/optics package, refer to C1441M-C.

The DRD14 Series of receiver/drivers is part of the IDS14 Series of domes. The IDS14 Series is an integral system that includes a back box (BB14), dome drive (DD14), and dome receiver/driver (DRD14). This manual covers the DRD14 Series of receiver/drivers. For installation and operation instructions for the back box, refer to manual C454M-C, and the the dome drive, refer to manual C458M-B.

2.1 MODELS

NOTE: *The DRD (dome receiver/driver) is not a field installable option; if it is to be used it must be ordered on the original factory order of the Dome Drive.*

DRD08A11	Receiver/driver for 8" Intercept® dome series. Basic receiver for fixed-speed dome drive. Coaxitron® control.
DRD14A11	Same as DRD08A11 except for use with 14" Intercept® dome series.
DRD14A12	Receiver/driver for 14" Intercept® dome series. Basic receiver for variable-speed dome drive. Coaxitron® control.
DRD08A21	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with fixed-speed dome drive. Coaxitron® control.
DRD14A21	Same as DRD08A21 except for use with 14" Intercept® dome series.
DRD08A22	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with variable-speed dome drive. Coaxitron® control.
DRD14A22	Same as DRD08A22 except for use with 14" Intercept® dome series.
DRD08D11	Receiver/driver for 8" Intercept® dome series. Basic receiver for fixed-speed dome drive. D-type control: RS-422 compatible with Pelco's MPT9500, CM6700 and CM8500 controllers or with American Dynamics controllers using the AD2083 Translator.
DRD14D11	Same as DRD08D11 except for use with 14" Intercept® dome series.
DRD14D12	Receiver/driver for 8" Intercept® dome series. Basic receiver for variable-speed dome drive. D-type control: RS-422 compatible with Pelco's MPT9500, CM6700 and CM8500 controllers or with American Dynamics controllers using the AD2083 Translator.
DRD08D21	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with fixed-speed dome drive. D-type control: RS-422 compatible with Pelco's MPT9500, CM6700 and CM8500 controllers or with American Dynamics controllers using the AD2083 Translator.
DRD14D21	Same as DRD08D21 except for use with 14" Intercept® dome series.

DRD08D22	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with variable-speed dome drive. D-type control: RS-422 compatible with Pelco's MPT9500, CM6700 and CM8500 controllers or with American Dynamics controllers using the AD2083 Translator.
DRD14D22	Same as DRD08D22 except for use with 14" Intercept® dome series.
DRD08P11	Receiver/driver for 8" Intercept® dome series. Basic receiver for fixed-speed dome drive. P-type control: RS-422 compatible with Pelco's CM6700 and CM9750/CM9760 control systems.
DRD14P11	Same as DRD08P11 except for use with 14" Intercept® dome series.
DRD14P12	Receiver/driver for 8" Intercept® dome series. Basic receiver for variable-speed dome drive. P-type control: RS-422 compatible with Pelco's CM6700 and CM9750/CM9760 control systems.
DRD08P21	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with fixed-speed dome drive. P-type control: RS-422 compatible with Pelco's CM6700 and CM9750/CM9760 control systems.
DRD14P21	Same as DRD08P21 except for use with 14" Intercept® dome series.
DRD08P22	Receiver/driver for 8" Intercept® dome series. Enhanced receiver with preset positioning, zones, and patterns. For use with variable-speed dome drive. P-type control: RS-422 compatible with Pelco's CM6700 and CM9750/CM9760 control systems.
DRD14P22	Same as DRD08P22 except for use with 14" Intercept® dome series.

3.0 INSTALLATION

Installation of the Dome Receiver/Driver (DRD) into the DD08 or DD14 Dome Drive is accomplished at the factory. **This is not a field installable option.**

3.1 ADJUSTMENTS

Although the DRD has been adjusted and set at the factory, some settings can and may require field adjusting.

3.1.1 CPU Board

1. **JP3** is set at the factory in the RS-485 (422) position. Leave it in this position.
2. **JP5** and **JP6** are both set in the UNTERM (unterminated) position. If the receiver is using RS-422 and is the last physical receiver in the chain, then the setting must be moved to the TERM (terminating) position (refer to Figures 1 and 2).
3. **JP1** and **JP2** are used to decode the EPROM. They are factory set JP1 pin 2 to JP1 pin 3 and JP2 pin 1 to JP2 pin 2. **DO NOT ALTER.**
4. **SW1** receiver address switch is for those units whose firmware supports either D- or P-type protocol. Refer to Figures 1 and 2 for the switch location. Refer to Table A to set the receiver address for units that use D-type protocol. Refer to Table B to set the receiver address and baud for units that use P-type protocol.

3.1.2 AC Power Supply Board PCB8500130

R26 20k ohm potentiometer sets the lens voltage. It is set at the factory at 10 volts. Refer to Figures 1 and 3. Refer to Section 4.2 for more information.

3.1.3 DC Power Supply Board PCB8500140

R27 20k ohm potentiometer sets the lens voltage. It is set at the factory at 10 volts. Refer to Figures 1 and 3. Refer to Section 4.2 for more information.

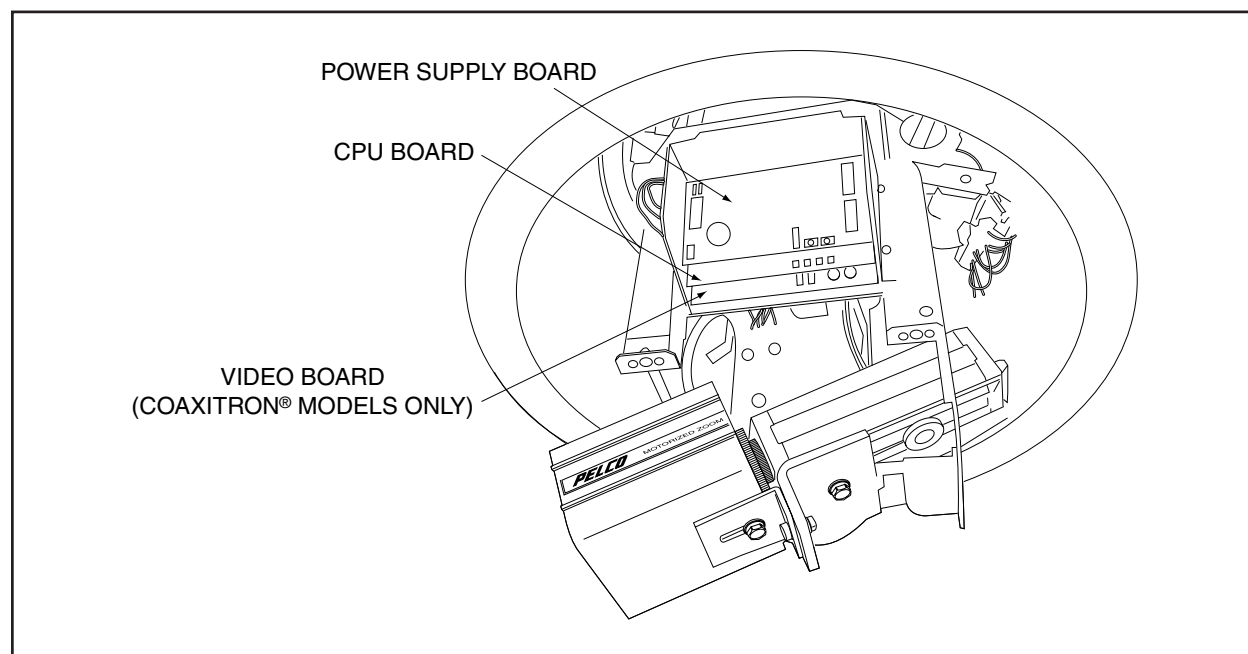


Figure 1. PC Board Locations

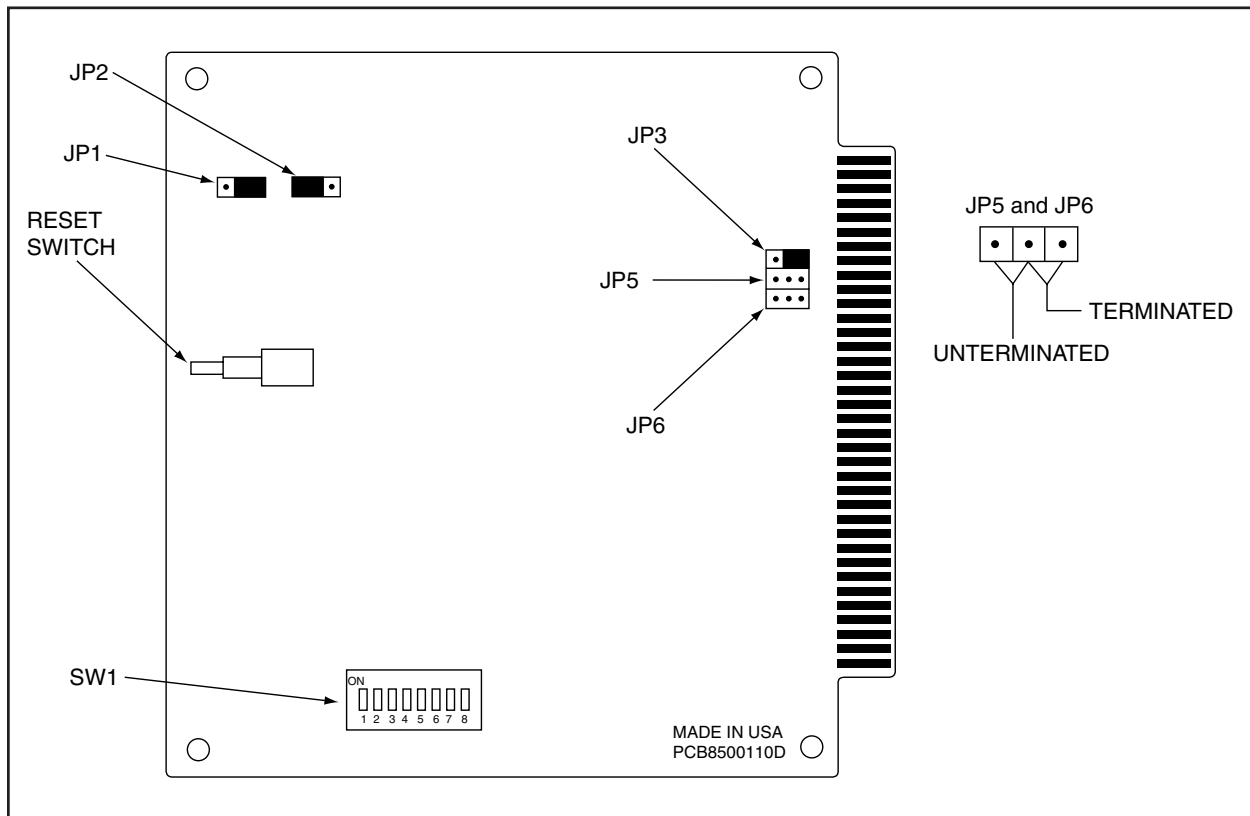


Figure 2. CPU Board

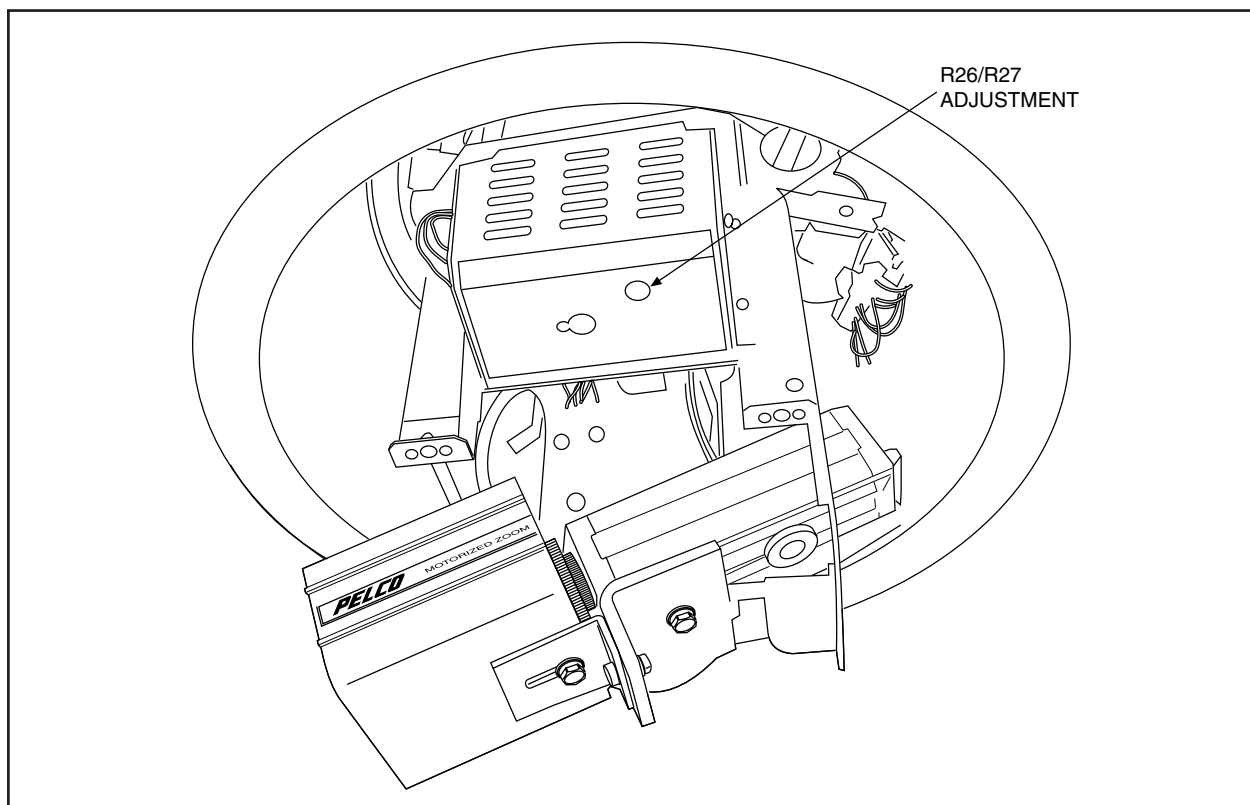


Figure 3. R26/R27 Adjustment Location

Table A. Switch Settings for SW1 - D-Type Control

NOTES: For Coaxitron® controls, SW1 is not used.
For P-type control systems, refer to Table B.

Receiver Address	Switch Setting							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
1	OFF	ON	ON	ON	ON	ON	ON	ON
2	ON	OFF	ON	ON	ON	ON	ON	ON
3	OFF	OFF	ON	ON	ON	ON	ON	ON
4	ON	ON	OFF	ON	ON	ON	ON	ON
5	OFF	ON	OFF	ON	ON	ON	ON	ON
6	ON	OFF	OFF	ON	ON	ON	ON	ON
7	OFF	OFF	OFF	ON	ON	ON	ON	ON
8	ON	ON	ON	OFF	ON	ON	ON	ON
9	OFF	ON	ON	OFF	ON	ON	ON	ON
10	ON	OFF	ON	OFF	ON	ON	ON	ON
11	OFF	OFF	ON	OFF	ON	ON	ON	ON
12	ON	ON	OFF	OFF	ON	ON	ON	ON
13	OFF	ON	OFF	OFF	ON	ON	ON	ON
14	ON	OFF	OFF	OFF	ON	ON	ON	ON
15	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	ON	ON	ON	ON	OFF	ON	ON	ON
17	OFF	ON	ON	ON	OFF	ON	ON	ON
18	ON	OFF	ON	ON	OFF	ON	ON	ON
19	OFF	OFF	ON	ON	OFF	ON	ON	ON
20	ON	ON	OFF	ON	OFF	ON	ON	ON
21	OFF	ON	OFF	ON	OFF	ON	ON	ON
22	ON	OFF	OFF	ON	OFF	ON	ON	ON
23	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	ON	ON	ON	OFF	OFF	ON	ON	ON
25	OFF	ON	ON	OFF	OFF	ON	ON	ON
26	ON	OFF	ON	OFF	OFF	ON	ON	ON
26	OFF	OFF	ON	OFF	OFF	ON	ON	ON
28	ON	ON	OFF	OFF	OFF	ON	ON	ON
29	OFF	ON	OFF	OFF	OFF	ON	ON	ON
30	ON	OFF	OFF	OFF	OFF	ON	ON	ON
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
32	ON	ON	ON	ON	ON	OFF	ON	ON
33	OFF	ON	ON	ON	ON	OFF	ON	ON
34	ON	OFF	ON	ON	ON	OFF	ON	ON
35	OFF	OFF	ON	ON	ON	OFF	ON	ON
36	ON	ON	OFF	ON	ON	OFF	ON	ON
37	OFF	ON	OFF	ON	ON	OFF	ON	ON
38	ON	OFF	OFF	ON	ON	OFF	ON	ON
39	OFF	OFF	OFF	ON	ON	OFF	ON	ON
40	ON	ON	ON	OFF	ON	OFF	ON	ON
41	OFF	ON	ON	OFF	ON	OFF	ON	ON
42	ON	OFF	ON	OFF	ON	OFF	ON	ON
43	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	ON	ON	OFF	OFF	ON	OFF	ON	ON
45	OFF	ON	OFF	OFF	ON	OFF	ON	ON
46	ON	OFF	OFF	OFF	ON	OFF	ON	ON
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
48	ON	ON	ON	ON	OFF	OFF	ON	ON

Continued on next page

Table A Switch Settings for SW1 - D-Type Control (continued)

Receiver Address	Switch Setting							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
49	OFF	ON	ON	ON	OFF	OFF	ON	ON
50	ON	OFF	ON	ON	OFF	OFF	ON	ON
51	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	ON	ON	OFF	ON	OFF	OFF	ON	ON
53	OFF	ON	OFF	ON	OFF	OFF	ON	ON
54	ON	OFF	OFF	ON	OFF	OFF	ON	ON
55	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
56	ON	ON	ON	OFF	OFF	OFF	ON	ON
57	OFF	ON	ON	OFF	OFF	OFF	ON	ON
58	ON	OFF	ON	OFF	OFF	OFF	ON	ON
59	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
60	ON	ON	OFF	OFF	OFF	OFF	ON	ON
61	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
62	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
63	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
64	ON	ON	ON	ON	ON	ON	OFF	ON
65	OFF	ON	ON	ON	ON	ON	OFF	ON
66	ON	OFF	ON	ON	ON	ON	OFF	ON
67	OFF	OFF	ON	ON	ON	ON	OFF	ON
68	ON	ON	OFF	ON	ON	ON	OFF	ON
69	OFF	ON	OFF	ON	ON	ON	OFF	ON
70	ON	OFF	OFF	ON	ON	ON	OFF	ON
71	OFF	OFF	OFF	ON	ON	ON	OFF	ON
72	ON	ON	ON	OFF	ON	ON	OFF	ON
73	OFF	ON	ON	OFF	ON	ON	OFF	ON
74	ON	OFF	ON	OFF	ON	ON	OFF	ON
75	OFF	OFF	ON	OFF	ON	ON	OFF	ON
76	ON	ON	OFF	OFF	ON	ON	OFF	ON
77	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	ON	OFF	OFF	OFF	ON	ON	OFF	ON
79	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
80	ON	ON	ON	ON	OFF	ON	OFF	ON
81	OFF	ON	ON	ON	OFF	ON	OFF	ON
82	ON	OFF	ON	ON	OFF	ON	OFF	ON
83	OFF	OFF	ON	ON	OFF	ON	OFF	ON
84	ON	ON	OFF	ON	OFF	ON	OFF	ON
85	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	ON	OFF	OFF	ON	OFF	ON	OFF	ON
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
88	ON	ON	ON	OFF	OFF	ON	OFF	ON
89	OFF	ON	ON	OFF	OFF	ON	OFF	ON
90	ON	OFF	ON	OFF	OFF	ON	OFF	ON
91	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
92	ON	ON	OFF	OFF	OFF	ON	OFF	ON
93	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
94	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
95	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
96	ON	ON	ON	ON	ON	OFF	OFF	ON
97	OFF	ON	ON	ON	ON	OFF	OFF	ON
98	ON	OFF	ON	ON	ON	OFF	OFF	ON
99	OFF	OFF	ON	ON	ON	OFF	OFF	ON
100	ON	ON	OFF	ON	ON	OFF	OFF	ON

Continued on next page

Table A Switch Settings for SW1 - D-Type Control (continued)

Receiver Address	Switch Setting							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
101	OFF	ON	OFF	ON	ON	OFF	OFF	ON
102	ON	OFF	OFF	ON	ON	OFF	OFF	ON
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
104	ON	ON	ON	OFF	ON	OFF	OFF	ON
105	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	ON	OFF	ON	OFF	ON	OFF	OFF	ON
107	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
108	ON	ON	OFF	OFF	ON	OFF	OFF	ON
109	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
110	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
111	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
112	ON	ON	ON	ON	OFF	OFF	OFF	ON
113	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	ON	OFF	ON	ON	OFF	OFF	OFF	ON
115	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
116	ON	ON	OFF	ON	OFF	OFF	OFF	ON
117	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
118	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
119	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
120	ON	ON	ON	OFF	OFF	OFF	OFF	ON
121	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
122	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
123	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
124	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
125	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
126	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
127	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
128	ON	ON	ON	ON	ON	ON	ON	OFF
129	OFF	ON	ON	ON	ON	ON	ON	OFF
130	ON	OFF	ON	ON	ON	ON	ON	OFF
131	OFF	OFF	ON	ON	ON	ON	ON	OFF
132	ON	ON	OFF	ON	ON	ON	ON	OFF
133	OFF	ON	OFF	ON	ON	ON	ON	OFF
134	ON	OFF	OFF	ON	ON	ON	ON	OFF
135	OFF	OFF	OFF	ON	ON	ON	ON	OFF
136	ON	ON	ON	OFF	ON	ON	ON	OFF
137	OFF	ON	ON	OFF	ON	ON	ON	OFF
138	ON	OFF	ON	OFF	ON	ON	ON	OFF
139	OFF	OFF	ON	OFF	ON	ON	ON	OFF
140	ON	ON	OFF	OFF	ON	ON	ON	OFF
141	OFF	ON	OFF	OFF	ON	ON	ON	OFF
142	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
144	ON	ON	ON	ON	OFF	ON	ON	OFF
145	OFF	ON	ON	ON	OFF	ON	ON	OFF
146	ON	OFF	ON	ON	OFF	ON	ON	OFF
147	OFF	OFF	ON	ON	OFF	ON	ON	OFF
148	ON	ON	OFF	ON	OFF	ON	ON	OFF
149	OFF	ON	OFF	ON	OFF	ON	ON	OFF
150	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
152	ON	ON	ON	OFF	OFF	ON	ON	OFF

Continued on next page

Table A Switch Settings for SW1 - D-Type Control (continued)

Receiver Address	Switch Setting							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
153	OFF	ON	ON	OFF	OFF	ON	ON	OFF
154	ON	OFF	ON	OFF	OFF	ON	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
156	ON	ON	OFF	OFF	OFF	ON	ON	OFF
157	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
158	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
159	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
160	ON	ON	ON	ON	ON	OFF	ON	OFF
161	OFF	ON	ON	ON	ON	OFF	ON	OFF
162	ON	OFF	ON	ON	ON	OFF	ON	OFF
163	OFF	OFF	ON	ON	ON	OFF	ON	OFF
164	ON	ON	OFF	ON	ON	OFF	ON	OFF
165	OFF	ON	OFF	ON	ON	OFF	ON	OFF
166	ON	OFF	OFF	ON	ON	OFF	ON	OFF
167	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
168	ON	ON	ON	OFF	ON	OFF	ON	OFF
169	OFF	ON	ON	OFF	ON	OFF	ON	OFF
170	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
172	ON	ON	OFF	OFF	ON	OFF	ON	OFF
173	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
174	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
175	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
176	ON	ON	ON	ON	OFF	OFF	ON	OFF
177	OFF	ON	ON	ON	OFF	OFF	ON	OFF
178	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
180	ON	ON	OFF	ON	OFF	OFF	ON	OFF
181	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
182	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
183	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
184	ON	ON	ON	OFF	OFF	OFF	ON	OFF
185	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
186	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
187	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
188	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
189	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
190	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
191	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
192	ON	ON	ON	ON	ON	ON	OFF	OFF
193	OFF	ON	ON	ON	ON	ON	OFF	OFF
194	ON	OFF	ON	ON	ON	ON	OFF	OFF
195	OFF	OFF	ON	ON	ON	ON	OFF	OFF
196	ON	ON	OFF	ON	ON	ON	OFF	OFF
197	OFF	ON	OFF	ON	ON	ON	OFF	OFF
198	ON	OFF	OFF	ON	ON	ON	OFF	OFF
199	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
200	ON	ON	ON	OFF	ON	ON	OFF	OFF
201	OFF	ON	ON	OFF	ON	ON	OFF	OFF
202	ON	OFF	ON	OFF	ON	ON	OFF	OFF
203	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
204	ON	ON	OFF	OFF	ON	ON	OFF	OFF

Continued on next page

Table A Switch Settings for SW1 - D-Type Control (continued)

Receiver Address	Switch Setting							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
205	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
206	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
207	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
208	ON	ON	ON	ON	OFF	ON	OFF	OFF
209	OFF	ON	ON	ON	OFF	ON	OFF	OFF
210	ON	OFF	ON	ON	OFF	ON	OFF	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
212	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
214	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
215	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
216	ON	ON	ON	OFF	OFF	ON	OFF	OFF
217	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
218	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
219	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
220	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
221	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
222	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
223	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
224	ON	ON	ON	ON	ON	OFF	OFF	OFF
225	OFF	ON	ON	ON	ON	OFF	OFF	OFF
226	ON	OFF	ON	ON	ON	OFF	OFF	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
228	ON	ON	OFF	ON	ON	OFF	OFF	OFF
229	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
230	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
231	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
232	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
234	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
235	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
236	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
237	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
238	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
239	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
240	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
242	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
243	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
244	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
245	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
246	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
247	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
248	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
249	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
250	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
251	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
252	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
253	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
254	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Table B. Switch Settings for SW1 - P-Type Control

NOTES: For Coaxitron® controls, SW1 is not used.
For D-type control systems, refer to Table A.

Receiver Address	Switch Setting				
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5
1	ON	ON	ON	ON	ON
2	OFF	ON	ON	ON	ON
3	ON	OFF	ON	ON	ON
4	OFF	OFF	ON	ON	ON
5	ON	ON	OFF	ON	ON
6	OFF	ON	OFF	ON	ON
7	ON	OFF	OFF	ON	ON
8	OFF	OFF	OFF	ON	ON
9	ON	ON	ON	OFF	ON
10	OFF	ON	ON	OFF	ON
11	ON	OFF	ON	OFF	ON
12	OFF	OFF	ON	OFF	ON
13	ON	ON	OFF	OFF	ON
14	OFF	ON	OFF	OFF	ON
15	ON	OFF	OFF	OFF	ON
16	OFF	OFF	OFF	OFF	ON
17	ON	ON	ON	ON	OFF
18	OFF	ON	ON	ON	OFF
19	ON	OFF	ON	ON	OFF
20	OFF	OFF	ON	ON	OFF
21	ON	ON	OFF	ON	OFF
22	OFF	ON	OFF	ON	OFF
23	ON	OFF	OFF	ON	OFF
24	OFF	OFF	OFF	ON	OFF
25	ON	ON	ON	OFF	OFF
26	OFF	ON	ON	OFF	OFF
27	ON	OFF	ON	OFF	OFF
28	OFF	OFF	ON	OFF	OFF
29	ON	ON	OFF	OFF	OFF
30	OFF	ON	OFF	OFF	OFF
31	ON	OFF	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF

Baud	Switch Setting		
	SW1-6	SW1-7	SW1-8
9600	OFF	ON	ON
4800	ON	OFF	ON
2400	ON	ON	OFF

4.0 OPERATION

Upon applying power, the unit starts a configuration routine after 15 seconds.

4.1 SCAN OPERATION

Three (3) different scan mode options are offered and can be selected according to operator preference:

Auto Scan; (AUX 2), continuous panning, with a 5-second stop on limits.

Random Scan; (AUX 3) random operation.

Frame Scan; (AUX 4) with 5 seconds of travel followed by 5 seconds of stop.

To select a scan mode (at the system controller), select the appropriate AUX button, then select scan.

4.2 PTZ (PAN/TILT AND LENS) CONTROLS

1. The DRD08**2 pan mechanism under standard operator control will move at less than one (1) degree per second and as fast as 40 degrees per second. In the preset or turbo mode, the unit will pan at greater than 200 degrees per second.
2. The DRD14**2 pan mechanism under standard operator control will move at less than one (1) degree per second and as fast as 20 degrees per second. In the preset or turbo mode, the unit will pan at greater than 100 degrees per second.
3. The DRD08**2 tilt mechanism under standard operator control will move at less than one (1) degree per second and as fast as 40 degrees per second. In preset mode, the unit will tilt at 90 degrees per second.
4. The DRD14**2 tilt mechanism under standard operator control will move at less than one (1) degree per second and as fast as 40 degrees per second. In preset mode, the unit will tilt at 45 degrees per second.
5. The DRD***2* lens functions are dependent on the lens used. The lens voltage can be set as described in section 3.1.2 or 3.1.3, depending on which is applicable. This voltage will set the highest speed at which the lens can move. For slower speeds the DRD can be programmed by the controller for 3/4 and 1/2 of this speed as described in the firmware section of this manual.

4.3 PRESET FUNCTIONS

NOTE: Preset commands are only in the 32-bit format.

NOTE: If the DRD is commanded to an undefined preset, erratic operation will result.

1. The DRD***2* units are capable of 32 complete preset scenes. On DRD**A2* models, each preset can have a 20-character label. To set a preset, first enter the label then program the position.
2. Once programmed, the DRD***2* can be commanded to the preset. Resolution of the pan and tilt position is 1/2 degree.
3. There are two (2) additional presets that can be programmed; they are **preset 33** "FLIP" command which will pan the dome drive 180 degrees from the position it is at, and **preset 34** "PAN ZERO" which will direct the dome drive to the factory determined zero reference point.

The following applies to dome firmware revision PRG08A21U3-R2.2 and higher for DRD08A21 and DRD14A21 dome receiver/driver types.

With pan limit stops installed, and when calling preset 34, the dome will move to the PAN ZERO position. After arriving at this position, the dome may bounce or jitter back and forth in half-degree increments around the zero position. If left undisturbed, the unit will continue this action until the 60-second time out has been reached. Control of the dome can be resumed at any time by sending a command.

Preset 34 is used in this application to set a zone across the zero position. To accomplish this in light of the above mentioned problem, follow the procedure outlined below.

1. Send the dome to preset 34.
2. When the dome arrives at the PAN ZERO position and begins to jitter, abort the preset call by actuating a lens function. The dome should now be positioned at the correct position, and the procedure in Section 4.5, ZONES, can be followed.

4.4 FLIP FUNCTION

The flip feature will move the pan position 180 degrees.

4.5 ZONES

NOTE: Zone scan must be OFF to program zones.

NOTE: Programming the DRD**A21 across the factory determined zero point will require splitting the zone in two, using the zero point as the end of one of the zones and the beginning of the other zone.

1. The DRD**A2* units are capable of 8 zones, each with a 20-character label. To set a zone, first move the unit to the left-most zone point, enter the label, then set the zone start point.
2. Next move the unit to the right to the second position and program the zone end point. The zone priority is from zone 8 to zone 1 with zone 8 having the highest priority. This means if two zones overlap, the one with the highest priority will be displayed.

4.6 PATTERNS

1. The DRD***2* units are capable of one 60-second pattern. This pattern can consist of any standard pan/tilt or lens command. Presets, flip and turbo are not allowed in a pattern. Zone scan can be enabled while running a pattern.
2. To program a pattern first move the pan/tilt and adjust the lens to the starting point desired. Engage the **Pattern Programming** command. The message "PROGRAMMING PATTERN" will be displayed. After this, any movement for the next 60 seconds will be remembered by the DRD. To create a pattern that plays back only once, continue programming until the message is removed. To create a pattern that repeats you must terminate the program before the time-out occurs and the DRD removes the message.
3. To play back a pattern, engage the **Run Pattern** command. The unit will move to the defined starting position and display the message "RUNNING PATTERN". Any subsequent command will terminate the pattern.

4.7 CLEAR VIDEO SCREEN

To clear the video display of any text supplied by the DRD, engage the **Clear Video Text** command.

4.8 RESET

On all units except the DRD***11 models, there is a reset switch on the CPU board (refer to Figure 4). If the dome drive stops working, try resetting it by pushing the reset switch for 10 seconds. In about 15 seconds, if the unit is working, it will begin to move and go through its start-up routine. You may also be able to issue a reset command from your controller; check the documentation for your controller.

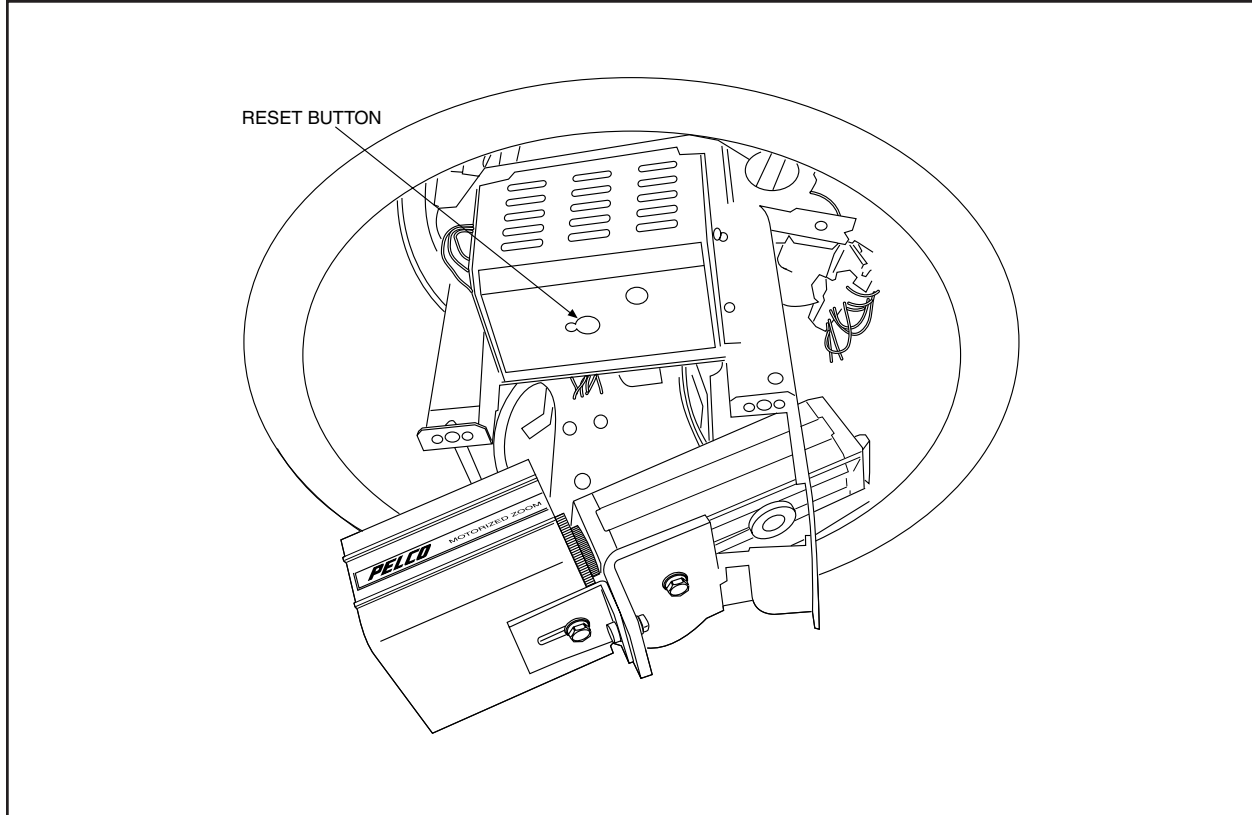


Figure 4. Receiver/Driver Reset Button Location

5.0 FIRMWARE

5.1 COAXITRON CONTROL COMMAND

This section describes the protocol used to send commands to the receivers via Coaxitron.

The hardware interface is a 32-bit PWM (pulse width modulated) signal, wherein a one microsecond pulse is considered a zero and a two microsecond pulse is considered a one. There will be a minimum one (1) microsecond off space between pulses. Line 18 will contain Bytes 1 and 2, line 19 will contain Bytes 3 and 4.

Commands are divided into two (2) categories. The first is referred to as **PTZ** (pan and tilt and lens) commands; the second category is **Extended** commands.

5.1.1 PTZ (Pan/Tilt and Lens) Commands

All PTZ (pan/tilt and lens) commands will always have B0 of Byte 2 set to zero. The remainder of the format is as follows:

Byte 1: B7 — Camera on, auto scan
 B6 — Coaxitron usage only
 B5 — Coaxitron usage only
 B4 — Auto scan, manual scan
 B3 — Camera on, camera off
 B2 — Iris close
 B1 — Iris open
 B0 — Focus near

Byte 2: B7 — Focus far
 B6 — Zoom wide
 B5 — Zoom tele
 B4 — Down
 B3 — Up
 B2 — Left
 B1 — Right
 B0 — always zero for a PTZ command

Byte 3: Pan speed with values 0 to 0x3F and 0xFF (pan turbo)

Byte 4: Tilt speed with values 0 to 0x3F

Examples:	Left, half Speed	00 04 1F 00
	Left, Turbo Speed	00 04 FF 00
	Stop	00 00 00 00

5.1.2 Extended Commands

Extended commands will always have B0 of Byte 2 set to one. The following numbers are in hexadecimal format:

Command	Byte 1	Byte 2	Byte 3	Byte 4
Set preset XX	00	03	00	01 to 20
Clear preset XX	00	05	00	01 to 20
Go to preset XX	00	07	00	01 to 20
80 FLIP preset	00	07	00	21
Set aux XX	00	09	00	01 to 08
Clear aux XX	00	0B	00	01 to 08
Remote Reset	00	0F	00	00
Program zone XX starting point	00	11	00	01 to 08
Program zone XX ending point	00	13	00	01 to 08
Write character YY to screen position XX	00	15	0 to 27	YY
Clear screen	00	17	00	00
Zone Scan On	00	1B	00	00
Zone Scan Off	00	1D	00	00
Pattern Start Point	00	1F	00	00
Pattern Stop Point	00	21	00	00
Run Pattern	00	23	00	00
Lens Speed	00	25	00	00 to 03

5.2 AMERICAN DYNAMICS AD2083 TYPE RS-422 CONTROL COMMAND

5.2.1 Protocol

1. The following describes the protocol used to send commands to the receivers via RS-422.
 - a. The hardware interface is four-wire RS-422, where one pair is used to issue commands to the receiver and one pair is used to receive responses from the receiver.
 - b. The protocol: one start bit, eight bits data, and one stop bit at 2400 baud.
2. The message format is 7 of these 10-bit words. Word one is the sync and is set to 0xFF, word two is the receiver address, words three and four are referred to as commands, words five and six as data, and word seven is the check sum.

Commands are divided into two categories. The first is referred to as **PTZ** (pan and tilt and lens) commands, the second category is **Extended** commands.

5.2.2 Addressing

The address is set on the CPU board PCB8500110. The switch is labeled SW1. Setting the switch in the "ON" position represents a zero. Refer to Table A.

SW1.1 Address Bit 0
SW1.2 Address Bit 1
SW1.3 Address Bit 2
SW1.4 Address Bit 3
SW1.5 Address Bit 4
SW1.6 Address Bit 5
SW1.7 Address Bit 6
SW1.8 Address Bit 7

NOTE: *Do not use addresses 0 or 255.*

5.2.3 PTZ (Pan/Tilt and Lens) Commands

All PTZ (pan/tilt and lens) commands will always have B0 of word 4 set to zero. The remainder of the format is as follows:

Word 3: B7 — Camera on, auto scan
B6 — Coaxitron usage only
B5 — Coaxitron usage only
B4 — Auto scan, manual scan
B3 — Camera on, camera off
B2 — Iris close
B1 — Iris open
B0 — Focus near

Word 4: B7 — Focus far
B6 — Zoom wide
B5 — Zoom tele
B4 — Down
B3 — Up
B2 — Left
B1 — Right
B0 — Always zero for a PTZ command

Word 5: Pan speed with values 0 to 0x3F and 0x40 (pan turbo)

Word 6: Tilt speed with values 0 to 0x3F

The following examples are for Words 3, 4, 5 and 6:

Left, Half Speed 00 04 1F 00
Left, Turbo Speed 00 04 40 00
Stop 00 00 00 00

5.2.4 Extended Commands

Extended commands will always have B0 of Word 4 set to one. The following numbers are in hexadecimal format:

Command	Word 3	Word 4	Word 5	Word 6
Set preset XX	00	03	00	01 to 20
Clear preset XX	00	05	00	01 to 20
Go to preset XX	00	07	00	01 to 20
180 FLIP preset	00	07	00	21
Zero pan position	00	07	00	22
Set aux XX	00	09	00	01 to 08
Clear aux XX	00	0B	00	01 to 08
Remote Reset	00	0F	00	00
Clear screen	00	17	00	00
Pattern Start Point	00	1F	00	00
Pattern Stop Point	00	21	00	00
Run Pattern	00	23	00	00
Lens Speed	00	25	00	00 to 03

The four word response format is: word one is the sync 0xFF, word 2 is the receiver address, word 3 is the alarm information, and word 4 is a return check sum (which is the transmitted check sum added to the alarm information).

5.3 PELCO “P” TYPE RS-422 CONTROL

5.3.1 Protocol

This section describes the protocol used to send commands to the receivers via RS-422. The hardware interface is four-wire RS-422, where one pair is used to issue commands to the receiver. The protocol is one start bit, eight bits data, and one stop bit at 9600, 4800 or 2400 baud. The message format is 8 of these 10-bit words with the following format:

WORD 1 — STX (0XA0)
WORD 2 — ADD (0 to 0X1F)
WORD 3 — Data as described below
WORD 4 — Data as described below
WORD 5 — Data as described below
WORD 6 — Data as described below
WORD 7 — ETX (0XAF)
WORD 8 — CRC

5.3.2 Addressing

The address is set on the CPU board PCB8500110. The switch is labeled SW1. Setting the switch in the "ON" position represents a zero. The first five positions set the receiver address (1 through 5) from a range of 0 to 31. The last three (6 through 8) set the baud rate. Refer to Table B.

SW1.1 — Address Bit 0
SW1.2 — Address Bit 1
SW1.3 — Address Bit 2
SW1.4 — Address Bit 3
SW1.5 — Address Bit 4
SW1.6 — 9600 Baud
SW1.7 — 4800 Baud
SW1.8 — 2400 Baud

5.3.3 Receiver Cards

The RS-422 style Intercept® receivers use only two of the three receiver cards. There must be a power supply (either AC or DC) and a CPU card. The video card is not used. Therefore the camera video output is connected directly to the slip ring. This eliminates the dome's ability to superimpose text on the video. This eliminates any label and zone feature. If these features are needed additional firmware will be needed.

5.3.4 Commands

Commands are divided into two (2) categories. The first is referred to as PTZ commands. The second category is Extended commands. The paragraphs below describe their functions.

5.3.4.1 PTZ (Pan/Tilt and Zoom) Commands

PTZ commands will always have B0 of word 4 set to zero. The remainder of the format is as follows.

Word 3 B7 — Always Zero (was camera on, auto scan)
 B6 — Camera On (was Coaxitron usage only)
 B5 — Auto Scan On (was Coaxitron only)
 B4 — Camera On, Camera Off (was auto scan, manual scan)
 B3 — Iris Close
 B2 — Iris Open
 B1 — Focus Near
 B0 — Focus Far

Word 4 B7 — Always Zero
 B6 — Zoom Wide
 B5 — Zoom Tele
 B4 — Down
 B3 — Up
 B2 — Left
 B1 — Right
 B0 — Always Zero for PTZ command

Word 5 Pan speed with values 0 to 0x3F and 0xx40 (Pan Turbo)

Word 6 Tilt speed with values 0 to 0x3F

5.3.4.2 Extended Commands

NOTE: *The extended commands above are available at the receiver; make sure commands can be initiated by the controlling system.*

Extended commands will always have B0 of Word 4 set to 1. The numbers below are in hexadecimal format.

Command	Word 3	Word 4	Word 5	Word 6
Set preset XX	00	03	00	01 to 20
Clear preset XX	00	05	00	01 to 20
Go to preset XX	00	07	00	01 to 20
180 Flip preset	00	07	00	21
Zero pan position	00	07	00	22
Set aux XX	00	09	00	01 to 08
Clear aux XX	00	0B	00	01 to 08
Remote Reset	00	0F	00	00
Pat. Start Point	00	1F	00	00
Pat. Stop Point	00	21	00	00
Run Pattern	00	23	00	00
Zoom Lens speed	00	25	00	00 to 03
Focus Lens speed	00	27	00	00 to 03

5.3.5 Acknowledgment

The receiver will respond with an ACK (0XA2).

6.0 CIRCUIT BOARD PARTS LIST

Table C. Circuit Board Parts List

Model	CPU Board	Video Board	Power Board	Backplane
DRD08A11	CPU08A11ASSY	PCB8500101ASSY	PCB8500130ASSY	PCB8500150ASSY
DRD08D11	CPU08D11ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD08P11	CPU08P11ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD08A21	CPU08A21ASSY	PCB8500100ASSY	PCB8500130ASSY	PCB8500150ASSY
DRD08D21	CPU08D21ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD08P21	CPU08P21ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD08A22	CPU08A22ASSY	PCB8500100ASSY	PCB8500140ASSY	PCB8500150ASSY
DRD08D22	CPU08D22ASSY		PCB8500140ASSY	PCB8500151ASSY
DRD08P22	CPU08P22ASSY		PCB8500140ASSY	PCB8500151ASSY
DRD14A11	CPU14A11ASSY	PCB8500101ASSY	PCB8500130ASSY	PCB8500150ASSY
DRD14D11	CPU14D11ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD14P11	CPU14P11ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD14A12	CPU14A12ASSY	PCB8500101ASSY	PCB8500140ASSY	PCB8500150ASSY
DRD14D12	CPU14D12ASSY		PCB8500140ASSY	PCB8500151ASSY
DRD14P12	CPU14P12ASSY		PCB8500140ASSY	PCB8500151ASSY
DRD14A21	CPU14A21ASSY	PCB8500100ASSY	PCB8500130ASSY	PCB8500150ASSY
DRD14D21	CPU14D21ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD14P21	CPU14P21ASSY		PCB8500130ASSY	PCB8500151ASSY
DRD14A22	CPU14A22ASSY	PCB8500100ASSY	PCB8500140ASSY	PCB8500150ASSY
DRD14D22	CPU14D22ASSY		PCB8500140ASSY	PCB8500151ASSY
DRD14P22	CPU14P22ASSY		PCB8500140ASSY	PCB8500151ASSY

7.0 SPECIFICATIONS

Input Voltage: 24 VAC, 60 Hz, $\pm 10\%$ at the drive

Maximum
Input Power
AC Motor

Dome Drive: Pan — 7.5 vA
Tilt — 7.5 vA
Idle — 2.5 vA

DC Stepper
Motor Dome
Drive:

Pan — 32 vA
Tilt — 32 vA
Pan/Tilt — 48 vA
Idle — 15 vA

Camera Output
Voltage:

24 VAC

Lens Output
Voltage:

9 to 12 VDC (Bi-polar)

Video Input
Level:

0.5 to 1.5 volts peak to peak

Video Input
Format:

NTSC or EIA

Video Bandwidth: 10 MHz

Baud Rate: 1 MHz

(Design and product specifications subject to change without notice.)



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

7.1 REGULATORY NOTICES

NOTE: This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

8.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge. Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

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